

**ABSTRACT****METHOD OF CALIBRATING A SCANNING SYSTEM**

A method of measuring an object on a coordinate positioning apparatus. A first object is placed on a coordinate positioning apparatus and measured with a workpiece contacting probe to create measurement data. The measurement data is collected at multiple stylus deflections or probe forces. For a plurality of points on the surface of the first object, the measurement data is extrapolated to that corresponding to zero stylus deflection or zero probe force. An error function or map is created from the measurement data and the extrapolated data.

Subsequent objects are then measured using a known stylus deflection or known probe force and the error function or map is used to apply an error correction to these measurements.

Fig 1